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REMARKS

This paper is responsive to a non-final Office action dated July 21, 2004. Claims 1-48 were examined.

Preliminary Matters

The Office has indicated that the form PTO-1499 from the information disclosure statement submitted on June 17, 2003 cannot be found. The Examiner has stated that this indication is incorrect and that all previously submitted information disclosure statements have been considered and are on file.

The Office has indicated that claims 22 – 27 and 37 – 46 are allowed on the Office Action Summary, but the Detailed Action indicates rejection of claim 22, and does not indicate allowance or rejection of claims 42 and 43. The rejection of claim 22 merely refers to the rejection of claim 1. Applicant assumes that claims 22, 42 and 43 are allowed as indicated in the Office Action Summary for replying to the outstanding Office Action, and respectfully requests verification of their allowed status.

Rejections under 35 U.S.C. §102(b)

The Office has rejected claims 1 – 3, 5 – 21, 28 – 29, 31 – 36, and 47 – 48 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,999,540. However, McGhee issued on December 7, 1999 and the subject patent application claims benefit of a provisional patent application filed on January 16, 2001. Hence, Applicant presumes rejection of the claims under 35 U.S.C. §102(b) in responding to the rejection. Applicant respectfully traverses all of the rejections.

In rejecting independent claims 1, 13, 15, 28, and 47, the Office relies on the same mistaken interpretation of McGhee. The rejection by the Office erroneously integrates training of an XDSL link with the retrieval of parameters (receiver gain and signal-to-noise ratio (SNR)) and selection of a baud rate disclosed by McGhee. **The retrieval of operating parameters and the link training are separate and distinct in McGhee.** McGhee discloses nothing more about training an XDSL link than “train at provisioned rate” at step 40, “train at lower rate” at step 44,

PATENT

"train at higher baud rate" at step 56, and "train at lower baud rate" at step 62. There is no other elaboration or disclosure with regard to training beyond determining whether training was successful at step 42 (Figure 4; col. 3, line 38 – col. 4, line 5). "[A]fter a successful train, the receiver gain and signal-to-noise ratio are retrieved from the trained parameters in step 46" (col. 3, lines 44 – 47). Furthermore, McGhee does not disclose transmitting the parameters. The parameters are utilized to select an allegedly optimal bit error rate (Figure 4; col. 3, line 51 – col. 4, line 6). The suggestion by the Office that McGhee discloses transmitting the SNR and the receiver gain cannot be supported by the disclosure of McGhee, and such an assertion conflicts with the functionality disclosed in McGhee. Parameters disclosed by McGhee are used for selecting a baud rate. In addition, these parameters are stored and retrieved from tables and not transmitted during a training interval or included within a training transmission. McGhee fails to anticipate any of Applicants claims, at least because McGhee does not disclose or suggest "selecting a training subset...and transmitting, during a training interval, substantially only the signal elements of the training subset" as recited in claims 1 and 13, "substantially limiting...a subset of tones transmitted as part of one of the training signals" as recited in claim 15, "a training signal generator...selective for a subset of less than all signal elements for inclusion in the training signal" as recited in claim 28, and "means for selecting...a subset of signal elements for inclusion in a training transmission" as recited in claim 47.

Rejections under 35 U.S.C. §103(b)

The Office has rejected claims 4 and 30 under 35 U.S.C. §103(a) as being unpatentable over McGhee in view of U.S. Patent No. 5,533,008, naming Grube et al. as inventors. Applicant respectfully traverses these rejections.

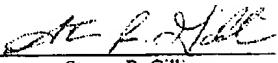
The combination of McGhee and Grube does not disclose or suggest Applicant's claims at least because McGhee does not disclose or suggest the subject matter of Applicant's independent claims as already discussed.

Conclusion

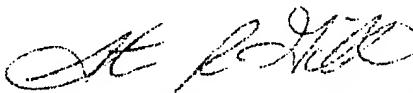
In summary, claims 1-48 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if

PATENT

any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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	<u>Oct. 21, 2004</u> Date
Steven R. Gilliam	

Respectfully submitted,



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